IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

INVENTOR: Dan Kikinis
CASE: P1523CIP
SERIAL NO.: 08/811,648
FILED: 03/05/1997
GROUP ART UNIT: 2157   **EXAMINER:** Jacobs, Lashonda T.
SUBJECT: Apparatus and Methods for Providing Home Networking for Single and Multimedia Electronic Devices

PARTY IN INTEREST: All inventions in the disclosure in the present case are assigned to or assignable to: Lextron Systems, Inc.

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sirs:

APPEAL BRIEF

1.0   Real Party in Interest

The real party in interest is Lextron Systems, Inc.

2.0   Related Appeals and Interferences

This is an appeal from the Office Action of the Examiner dated April 11, 2006 rejecting claims 1-4, 7-9 and 14-17, the only pending claims in the application. There are no related appeals of the claims in this case or interferences in the instant case.

3.0   Status of the Claims

Following is the status of all claims in the instant case:
1. Rejected - appealed in this brief; independent .
2. Rejected - appealed in this brief; dependent.
3. Rejected - appealed in this brief; dependent.
4. Rejected - appealed in this brief; dependent.
7. Rejected - appealed in this brief; independent.
8. Rejected - appealed in this brief; dependent.
9. Rejected - appealed in this brief; dependent.
14. Rejected - appealed in this brief; dependent.
15. Rejected - appealed in this brief; dependent.
16. Rejected - appealed in this brief; dependent.
17. Rejected - appealed in this brief; dependent.

4.0   Status of Amendments

No amendments have been filed subsequent to the rejection of claims 1-4, 7-9, 14-17, the subjects of this appeal.

5.0   Summary of the Claimed Subject Matter

Following is a concise explanation of the subject matter defined in each of the two standing independent claims including their dependent claims.

5.1 Independent apparatus claim 1

1. (Previously presented) A networking system for a home or business site, comprising:

a bridge adapter unit (Fig. 301; pg. 9 lines 12-28) at the home or business site, having a first connection point for connecting to an external communication network and receiving public network protocol signals; and

a telephone wiring structure in the site (pg. 7, lines 8-14), the wiring structure having multiple end points and one or more junctions, and connected at a single point to a second connection point of the bridge adapter unit (Fig. 3 items 302a-d);

characterized in that the bridge adapter unit operates the telephone wiring structure according to a Local Area Network (LAN) protocol, translates received public network protocol signals to a LAN protocol required by the telephone wiring structure, and modulates the signals in a manner to correct any signal variations at the end points due to having multiple end points operated from a single point at the bridge adapter unit (pg. 9, lines 8-30).

In summary, the provided system is capable of receiving public network protocol signals at a single point at a bridge adapter unit at a residence or business translating said signals to a local area network (LAN) protocol, connecting at a single point on an existing telephone wiring architecture in a business or residence wherein the wiring structure has a plurality of junctions and endpoints. The bridge adapter modulates the signals in a manner to correct any signal variations at the end points due to having multiple end points operated from a single point at the bridge adapter unit.

5.2 dependent claims 2-4

Dependent claims 2-4 further provide one or more converters connected at individual ones of the end points, the one or more converters comprising each an outlet port to connect to a single-media or a multi-media device, the converters converting the LAN signals to a form required by the single-media or multi-media devices, wherein the single-media and multi-media electronic devices include one or more of telephones, personal computers, fax machines, and televisions running through set top boxes.

5.3 independent method claim 7

7. (Previously presented) A method for implementing a networking system, comprising the steps of:

(a) delivering public network protocol signals to a level of a home or business site (link 320; pg. 8 lines 12-20);

(b) installing a bridge adapter unit having a first connection point for connecting to an external communication network and receiving public network protocol signals at the site (Fig. 301; pg. 9 lines 12-28);

(c) connecting a telephone wiring structure having multiple end points and one or more junctions, at a single connection point to a second connection point of the bridge adapter unit (Fig. 3);

(d) operating the telephone wiring structure according to a single Local Area Network (LAN) protocol by the bridge adapter unit, translating and converting the public network protocol signals into a LAN protocol required by the telephone wiring structure (pg. 9, lines 8-30); and

(e) modulating the signals in a manner to correct variations at the end points due to having multiple end points operated from the single point at the bridge adapter unit (pg. 9, lines 8-30).

In summary method claim 7 presents the steps needed to implement the networking system including delivering public network protocol signals to a home or business site to a bridge adapter unit having a first connection point for receiving public

network protocol signals at the site; connecting a telephone wiring structure having multiple end points and one or more junctions, to a second connection point of the bridge adapter unit; operating the telephone wiring structure according to a single Local Area Network (LAN) protocol by the bridge adapter unit, translating and converting the public network protocol signals into a LAN protocol required by the telephone wiring structure; and modulating the signals in a manner to correct variations at the end points due to having multiple end points operated from the single point at the bridge adapter unit.

5.4 dependent claims 8-9 and 14-17

Dependent claims 8-9 and 14-17 further provide steps for installing one or more converters connected at individual ones of the end points, the one or more converters comprising each an outlet port to connect to a single-media or a multi-media device, the converters converting the LAN signals to a form required by the single-media or multi-media device wherein the single-media or multi-media devices include one or more of telephones, personal computers, fax machines, and televisions running through set-top boxes. Also, the converters may be integrated into individual ones of the single-media or multi-media devices, the converters are internal modules or integrated with individual ones of the single-media or multi-media devices.

6. Grounds of Rejection to be Reviewed on Appeal

Independent claim 1, independent claim 7 and dependent claims 2-4, 8-9 and 14-17 are all rejected on the same grounds being rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman, U.S. Patent No. 5,844,596 in view of Chau et al. (Chau), U.S. Patent No. 5,764,750 and in further view of Eames et al. (Eames), U.S. Patent No. 6,317,884.

7. Argument

Following is a presentation of arguments against the rejection put forth by the

Examiner.

7.1 35 U.S.C. 103 against claim 1

The Examiner's Arguments:

Regarding claim 1, the Examiner states Goodman discloses the invention substantially as claimed. Goodman discloses a networking system for home or business site [see Goodman, Abstract, Col. 3, lines 1-56], comprising. a bridge adapter unit at the home or business site [see Goodman, item 4001 having a first connection point for connecting to an external communication network and receiving signals [see Goodman, Col. 8, lines 9-10]; and a telephone wiring structure in the site, the wiring structure having multiple endpoints and one or more junctions [see Goodman, Col. 8, lines 1-25].

Even though, Goodman does disclose a system that allows for distribution of other signals to a local network of an active telephone line and that the signals that are received are in the form of a local area network protocol. However, Goodman does not explicitly disclose the specifics of a bridge adapter unit receiving public network protocol signals and that the bridge adapter unit drives telephone wiring structure according to a local area network (LAN) protocol, translates all received public network protocol signals, regardless of protocol, to the single LAN protocol and modulates the signals in a manner to correct signal variations at the end points due to having multiple end points drive from a single point at he bridge adapter unit.

In the same field of endeavor, Chau discloses (e.g., communicating between diverse communications environment). Chau discloses a bridge adapter unit receiving. public network protocol signals and the bridge adapter unit operating the telephone wiring structure according to a local area network (LAN) protocol, translates received public network protocol signals, regardless of protocol, to the single LAN protocol (Chau teaches a subsystem 11 may be substantially any desired communications arrangement. For example, it may be another telephony subsystem, like subsystem 12. Preferably, however, subsystem 11 is a connections- rich subsystem, such as a data or a multi-media communications subsystem. Subsystem 11 illustratively comprises a switching node 33,

for example a local area network (LAN) server, a broadband multi-media switching hub, or an asynchronous transfer mode (ATM) packet switch, that provides data or multi-media communications services to a plurality of endpoints such as user workstations 37-39. Switching node 33 includes a node processor 34 that executes switching-node control programs out of node memory 35 and controls one or more switching fabrics 36 (e.g., LAN, crosspoint switch, etc.) that provide communications connections between workstations 37-39 as well as other endpoints. For purposes of this discussion, the principal function performed by node processor 34 is that of a name-server or router: it converts connection requests (received from workstations 37-39) that are expressed in terms of originating and terminating endpoint names and/or addresses into corresponding connections (with the aid of PBX 13, as will be made clear below), [see Chau, Figure 1, item 40, abstract, Col. 1, lines 60-67, Col. 2, lines 1-27]

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Chau's teachings of communicating between diverse communications environment with the teachings of Goodman, because of the need to solve the problem of telecommunications systems that have different protocols requiring having different capabilities of their endpoints [see Chau, Col. 1, lines 37-45]. Goodman would have been motivated to do so, since he states that the invention further adds to techniques for distribution of signals to a local area network of active telephone wiring [see Goodman, Col. 1, lines 55-67].

In the same field of endeavor, Eames discloses (i.e., video, data and telephony gateway). Eames discloses and modulates the signals in a manner to correct signal variations at the end points due to having multiple endpoints driven from a single point at the bridge adapter unit [see Eames, Col. 1, lines 48-56].

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Eames' teachings of a video, data and telephony gateway with the teachings of Goodman-Chau, for the purpose of having a centralized unit in the home which can provide video, data, and telephony services, and methods for communicating with the centralized unit from

different locations within the home [see Eames, Col. 1, lines 36-46]. By this rationale claim 1 is rejected.

Appellant's response:

The Examiner relies upon Goodman to teach a bridge adapter unit as recited in applicant's claims in light of the teachings in applicant's specification. Applicant argues that Goodman fails to disclose a Bridge adapter unit, as claimed. Goodman teaches an interface, which is not capable of any of the functions of a bridge adapter unit, as claimed. Therefore it does not bridge or adapt protocol signals, as claimed and cannot read on such a unit as claimed in applicant's invention. The Examiner admits as much. Goodman, therefore only teaches the telephone wiring structure.

The Examiner relies upon Chau to teach the specifics of a bridge adapter unit receiving public network protocol signals and that the bridge adapter unit driving telephone wiring structure according to a local area network (LAN) protocol, translating all received public network protocol signals, regardless of protocol, to the single LAN protocol and modulates the signals in a manner to correct signal variations at the end points due to having multiple end points drive from a single point at he bridge adapter unit.

Applicant argues Chau teaches an "ISDN Port Circuit and Protocol Converter" (Fig. 1, element 40), and does not teach translating protocols as claimed. The invention of Chau relates to communicating between endpoints in a telecommunications or computer sub-system. Chau teaches connections-rich sub-systems, and converting protocols, but teaches separate ISDN ports (20, 40) for each subsystem. Chau fails however, as do either of the remaining references, in teaching or suggesting that the telephone wiring structure is connected at a single point to the bridge adapter unit, and the signals are modulated in a manner to correct any signal variations at the end points due to having multiple end points operated from a single point at the bridge adapter unit.

Eames teaches a residential Gateway, but still fails to teach or suggest driving all incoming public network protocol signals, utilizing a single bridge adapter unit, over an

internal network comprising but one type of wiring, such as a pre-existing telephone wiring of the building as taught in our invention.

Further, neither reference teaches or suggests that the telephone wiring structure is connected at a single point to the bridge adapter unit, and the signals are modulated in a manner to correct any signal variations at the end points due to having multiple end points operated from a single point at the bridge adapter unit, as in applicant's invention and claims. Eames utilizes a variety of interface units, splitters, different types of drop wiring leading to the site 190, and different types of cabling requiring different protocols, within site 190 for creating the internal network for connecting the various appliances.

Applicant argues it would not have been obvious to integrate Eames and it's teachings with Goodman and Chau because there is no motivation provided in any of the art to provide a single interface unit, accepting all incoming signals, regardless of their protocol, converting all the incoming signals to a single LAN protocol, and driving the signals according to the LAN protocol throughout the internal network of the building site utilizing only a single type of wiring, namely the copper telephone wiring pre-existing within the building site. Applicant argues that without the Examiner incorporating hindsight knowledge of applicant's invention, the motivation for the combination of the art could not have been made.

Applicant argues that, if one were to install the system of Eames in a residential or commercial building, for example, it would be required to also install the various different types of cabling and wiring, such as coaxial cabling 171, or any other type of wiring, other than the existing telephone wiring in the building. In applicant's invention it is only required that a single bridge adapter unit 301 be installed at the building site for converting all of the incoming signals of various protocols to a single LAN protocol to be driven over the existing telephone wiring within the building, and if needed, signal conversion interfaces such as 305a-b for converting the LAN signals back to a different protocol required by any devices not LAN protocol compatible.

So the appellant asserts that a proper rejection, under 35 U.S.C. 103, is not supported by the combination of Goodman, Chau and Eames. Appellant therefore

strongly believes that all of the claims standing are clearly and unarguably patentable over the art. Accordingly, appellant respectfully requests that the Board reverse the rejection of the claims and hold the claims allowable.

8. **Claims Appendix**

The claims involved in the appeal are:

1. (Previously presented) A networking system for a home or business site, comprising:

a bridge adapter unit at the home or business site, having a first connection point for connecting to an external communication network and receiving public network protocol signals; and

a telephone wiring structure in the site, the wiring structure having multiple end points and one or more junctions, and connected at a single point to a second connection point of the bridge adapter unit;

characterized in that the bridge adapter unit operates the telephone wiring structure according to a Local Area Network (LAN) protocol, translates received public network protocol signals to a LAN protocol required by the telephone wiring structure, and modulates the signals in a manner to correct any signal variations at the end points due to having multiple end points operated from a single point at the bridge adapter unit.

2. (Previously presented) The networking system of claim 1 further comprising one or more converters connected at individual ones of the end points, the one or more converters comprising each an outlet port to connect to a single-media or a multi-media device, the converters converting the LAN signals to a form required by the single-media or multi-media device.

3. (Previously presented) The networking system of claim 2 further comprising one or more single-media or multi-media devices connected to one or more of the converters.

4. (Previously presented) The networking system of claim 3 wherein the single-media and multi-media electronic devices include one or more of telephones, personal computers, fax machines, and televisions running through set top boxes.

5 - 6. (Canceled)

7. (Previously presented) A method for implementing a networking system, comprising the steps of:

(a) delivering public network protocol signals to a level of a home or business site;

(b) installing a bridge adapter unit having a first connection point for connecting to an external communication network and receiving public network protocol signals at the site;

(c) connecting a telephone wiring structure having multiple end points and one or more junctions, at a single connection point to a second connection point of the bridge adapter unit;

(d) operating the telephone wiring structure according to a single Local Area Network (LAN) protocol by the bridge adapter unit, translating and converting the public network protocol signals into a LAN protocol required by the telephone wiring structure; and

(e) modulating the signals in a manner to correct variations at the end points due to having multiple end points operated from the single point at the bridge adapter unit.

8. (Previously presented) The method of claim 7 comprising a further step installing one or more converters connected at individual ones of the end points, the one or more converters comprising each an outlet port to connect to a single-media or a multi-media device, the converters converting the LAN signals to a form required by the single-media or multi-media device.

9. (Previously presented) The method of claim 8 wherein, in the further step, the single-media or multi-media devices include one or more of telephones, personal computers, fax machines, and televisions running through set-top boxes.

10-13. (Canceled)

14. (Previously presented) The networking system of claim 3 wherein individual ones of the converters are integrated into individual ones of the single-media or multi-media devices.

15. (Previously presented) The networking system of claim 3 wherein individual ones of the converters are internal modules of individual ones of the single-media or multi-media devices.

16. (Previously presented) The method of claim 8 wherein individual ones of the converters are integrated into individual ones of the single-media or multi-media devices.

17. (Previously presented) The method of claim 8 wherein individual ones of the converters are internal modules in individual ones of the single-media or multi-media devices.

9.   Evidence Appendix

No evidence other than the arguments and facts presented in this brief is provided.

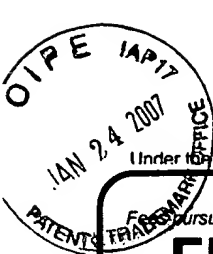## 10.   Related Proceedings Appendix

The present Appeal is the second such Appeal submitted to the Board. An answer
to the first Appeal was mailed on March 08, 2004.

Respectfully Submitted,
Dan Kikinis

by *|Donald R. Boys|*
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Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2005

☑ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT	($)	250.00

Complete if Known

Application Number	08/811,648
Filing Date	03/05/1997
First Named Inventor	Dan Kikinis
Examiner Name	Lashonda T. Jacobs
Art Unit	2157
Attorney Docket No.	P1523CIP

METHOD OF PAYMENT (check all that apply)

☑ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☑ Deposit Account   Deposit Account Number: 50-0534   Deposit Account Name: Mark A. Boys

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below

☐ Charge fee(s) indicated below, **except for the filing fee**

☑ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17

☑ Credit any overpayments

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES Fee ($)	Small Entity Fee ($)	SEARCH FEES Fee ($)	Small Entity Fee ($)	EXAMINATION FEES Fee ($)	Small Entity Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	0
Design	200	100	100	50	130	65	0
Plant	200	100	300	150	160	80	0
Reissue	300	150	500	250	600	300	0
Provisional	200	100	0	0	0	0	0

2. EXCESS CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims		Extra Claims		Fee ($)		Fee Paid ($)
0	- 20 or HP =	0	x	25	=	0

HP = highest number of total claims paid for, if greater than 20

Indep. Claims		Extra Claims		Fee ($)		Fee Paid ($)
0	- 3 or HP =	0	x	100	=	0

HP = highest number of independent claims paid for, if greater than 3

Multiple Dependent Claims

Fee ($)	Fee Paid ($)
0	0

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets		Extra Sheets		Number of each additional 50 or fraction thereof		Fee ($)		Fee Paid ($)
____	- 100 =	0	/ 50 =	0 (round up to a whole number)	x	125	=	0

4. OTHER FEE(S)

	Fees Paid ($)
Non-English Specification, $130 fee (no small entity discount)	0
Other: Filing a brief in support of an appeal	250.00

SUBMITTED BY

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Name (Print/Type)	Donald R. Boys			Date	01/24/2007